

DOCUMENT RESUME

ED 401 927

IR 056 202

AUTHOR Lopeman, Holly
TITLE The Development of an Electronic Interlibrary Loan Form at the Ohio State University Prior Health Sciences Library: A Survey.
PUB DATE Dec 95
NOTE 50p.; Master's Research Paper, Kent State University.
PUB TYPE Dissertations/Theses - Undetermined (040) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Libraries; Access to Information; Computer Networks; Computers; Computer Uses in Education; Higher Education; Information Retrieval; *Interlibrary Loans; *Library Automation; Library Materials; *Library Surveys; Online Systems; *Records (Forms); Shared Library Resources; *User Needs (Information); World Wide Web
IDENTIFIERS *Access to Computers; Computer Use; Gopher; *Ohio State University; Telnet

ABSTRACT

A survey of computer hardware and software access, network familiarity, and systems use was conducted to determine the optimum placement of two newly developed electronic Interlibrary Loan (ILL) forms at the Ohio State University Health Sciences Library. A sample of 205 ILL users were mailed a questionnaire, with a resultant 72% (n=148) response rate. The majority of respondents were graduate students; other respondents included faculty, staff, and undergraduates. Findings include: (1) most respondents would prefer to place their interlibrary loan request through the campus computing network; (2) most patrons surveyed would like to have their ILL materials mailed to their campus office, and the second most popular preference was receipt through the campus computing network; (3) 45% of respondents have access to a computer with telecommunications abilities at both their home and their office; (4) 33% of respondents are active in their university computer accounts more than once each day; and (5) gopher is still the favorite Internet resource, followed by telnet and the World Wide Web. Results of the study conclude that the best places for the two new ILL forms are through the campus gopher and on the World Wide Web. Appendices include a list of "other" patron types, data tables, Web and gopher ILL forms, correspondence, and the access questionnaire. (Author/SWC)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED 401 927

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☐ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

THE DEVELOPMENT OF AN ELECTRONIC
INTERLIBRARY LOAN FORM AT THE OHIO STATE UNIVERSITY
PRIOR HEALTH SCIENCES LIBRARY: A SURVEY

A Master's Research Paper submitted to the
Kent State University School of Library and Information Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Holly Lopeman

December, 1995

BEST COPY AVAILABLE

2

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Holly Lopeman

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

1R056202

A survey of computer hardware/software access, network familiarity, and systems use was conducted to determine the optimum places for two newly developed Interlibrary Loan forms at the Ohio State University Health Sciences Library. A sample was chosen from ILL users over a full year. Pertinent findings include: 1. most respondents would prefer to place their Interlibrary Loan request through the campus computing network; 2. most patrons surveyed would like to have their received ILL materials mailed to their campus office, followed by receipt through the campus computing network; 3. forty-five percent of respondents have access to a computer with telecommunications abilities at both their home and their office; 4. thirty-three percent of respondents are active in their university computer accounts more than once each day; and 5. Gopher is still the favorite Internet tool/resource, followed by telnet and the World Wide Web. Results of the study conclude that the best places for the two new ILL forms are through the campus Gopher and on the World Wide Web.

Master's Research Paper by

Holly Lopeman

B.A., Texas Tech University, 1986

M.L.S., Kent State University, 1995

Approved by

Adviser

May S. Chachin

Date

11/15/95

TABLE OF CONTENTS

LIST OF GRAPHS	iv
INTRODUCTION	1
Objectives	2
Definition of Terms	3
REVIEW OF THE LITERATURE	4
METHODOLOGY	6
Research Population	6
Survey Instrument	7
Procedure	8
Data Analysis	8
RESULTS	9
General demographics	9
Objective 1	14
Objective 2	18
CONCLUSION	21
REFERENCE LIST	26
APPENDICES	27
I. "Other" patron types	27
II. Tables 1-3	28
III. Tables 4-7	30
IV. Tables 8-11	32
V. World Wide Web ILL form	34
VI. Gopher ILL form	37
VII. Correspondence and Questionnaire	40

LIST OF GRAPHS

Graph	Page
1. Respondent demographics by patron type	9
2. Frequency of ILL use by patron type	11
3. ILL placement preferences by patron type	12
4. ILL receiving preferences by patron type	13
5. Computer with modem access by patron type	15
6. Location of computer with modem by patron type	15
7. Method of network access from home by patron type	16
8. Method of network access from office/lab by patron type	17
9. Ownership of Magnus account by patron type	18
10. Magnus account use by patron type	19
11. OASIS use by patron type	20
12. Preferred method of Internet access by patron type	21

Introduction

Computers are revolutionizing libraries. This has been the topic of uncounted essays and scholarly investigations for over two decades. Much discussion is dedicated to new ways of approaching traditional library services such as reference, acquisitions, and document delivery.

Along with the development of huge electronic databases with extensive citations and other information--such as Dialog and BRI--came thousands of people who wanted access to them. This access was realized through the use of computers with telecommunication abilities. Logically following this expanded access to scholarly citations came the demand for the entire article. In order to get this article, the investigator was forced to interrupt his activities, go to the library, and fill out an Interlibrary Loan request form. Why not allow the scholar to submit and receive their documents from the desktop as well? This vision was expressed by the President of Dialog Information Services, Inc. in 1986 when he said that "the smallest library in the farthest reaches of America can be plugged into a worldwide electronic network that will make available, literally, nearly all of civilization's recorded knowledge. By that time it will be possible to print photocopy facsimiles of any document, along with any photographs, art, statistics, and charts, on a local terminal workstation" (Newman 1986). Well, that time is here; the "e-library" is at hand.

The Prior Health Sciences Library at Ohio State University (OSU) strives to be on the edge of the new technological developments available to libraries and their patrons. The Health Sciences Library supports the Colleges of Medicine, Dentistry,

Nursing, Optometry, and Allied Medicine (e.g. Physical Therapy). It also serves as the principal information center for the Nisonger Center for Mental Retardation and Developmental Disabilities, the University Hospitals and Clinics, and the Arthur G. James Cancer Hospital and Research Institute.

There are over 236,260 volumes consisting of 2,747 serial titles and 59,677 monographs. The Health Sciences Library is a designated National Library of Medicine Research Library and serves as a reference and document delivery source for hospitals throughout Central Ohio.

Objectives

The ultimate goal of the project was to identify the best possible access points for two newly developed electronic Interlibrary Loans, one through the Ohio State University's Prior Health Sciences Library and another in conjunction with the Ohio State University Libraries system. Survey questions were designed around two specifically defined objectives. The first of these objectives was to determine the hardware/software that is available to the patron. Computers with these capabilities may be located in that user's office, campus computing site, or home. Objective number two was to find out the campus electronic resources, networks, and tools that were familiar to and taken advantage of by the patron. The frequency of networked computer use was also of interest. These objectives were met by conducting a survey of a sample of ILL users at the Health Sciences Library. A follow-up project will be to conduct personal interviews with some of these patrons in order to get their input about the newly created forms.

Definition of Terms

Because of the nature of the study, there are a number of terms that require definition. The fact that the survey was limited to Ohio State University also leads to some location-specific terminology.

Sonnet is an electronic transmission technique. It ties various computers together using fiber optics, special coaxial cable, and/or high speed telephone wiring.

Sonngate serves as a gateway to Sonnet for off-campus users. It employs regular telephone lines and requires a modem. Speed is always slower than a direct Sonnet connection, and depends greatly upon modem baud rate.

Magnus is a large cluster of networked computers at Ohio State that run on a Unix-like operating system. Ownership of a Magnus account provides the user with E-mail and newsgroups. It is an old system that is currently being upgraded, but is still used by many, and is firmly entrenched in the Ohio State University computer user's vocabulary.

HomeNet is the software package distributed by the Academic Technology Service at OSU. It uses Sonngate to provide the off campus patron access to E-mail, newsgroups, telnet, Gopher, and FTP. It also allows access to the World Wide Web. HomeNet and its counterpart OfficeNet will supersede Magnus.

Hospital backbone (Gate) is a specialized network for the OSU Hospitals. It allows physicians, residents, and other hospital employees access to the rest of the Ohio State University computer network and the Internet. It also acts as a firewall to prevent unwanted access to the Hospital's computer network.

OASIS is the Ohio State University gopher server. It is the link for information services on campus as well as the Internet.

WAIS is an acronym for Wide Area Information Server. It serves as a connection from the client computer to other information servers, and uses natural language queries.

OhioLink is a consortium of Ohio colleges and universities, mostly public but some private, with an online union catalog and shared borrowing privileges.

Review of the Literature

There is very little literature that is available on a topic of such a specific nature. Although the idea of full text document delivery through the computer is not new, there are virtually no studies about the planning stages of the development of the service, or the success thereof. There is ample research to prove that services developed with the customer--in this case the library patron--are vital in the successful development and implementation of new electronic services (Ives and Olson 1984).

An experiment at Aston University in Birmingham, England allows each patron to use a sort of "self-service" document delivery. After the library user decides which citations are relevant to their study they go to a computer system called ADONIS (Corrall 1993). Through this computer the patron is able to retrieve the full text of the article that they need. There is no mention, however, that the patron may be able to access this computer electronically.

A similar type of service to the one being developed with the help of this study is already offered at the University of Tennessee, Memphis. UT Memphis is the health sciences campus for the state university. Users access, through their computer, a "library services" menu. This menu leads them to services that provide photocopies of articles that the library owns, as well as allowing for electronic Interlibrary Loans requests to be submitted through the campus computer network (Bellamy 1991). The patron then has a choice of either picking up the requested materials at the library, or having them mailed to a campus location through the campus mail service. There was no suggestion of a preliminary study that would have determined the patron access to computers, except to say that there are campus-wide computing sites with high-speed connections.

A third publication sponsored by the University of Southern California (USC) investigates certain electronic capabilities and access by faculty, staff, and students of universities around the United States. The USC study is perhaps the most comparable to the results contained in this research paper. The USC National Survey of Desktop Computing in Higher Education is a survey that has been conducted annually since 1991. It was conducted "at over 2500 institutions. Data were [sic] responses from public and private research universities, public and private four-year colleges and community colleges" (Green and Eastmen 1993, i). The percentages related in this study at Ohio State correspond to the "Public University" classification in the USC report since that is the category in which Ohio State University would fall. It reports that on the average ninety-nine percent of faculty have Internet access, as well as

ninety-seven percent of staff, ninety-seven percent of graduate students, and ninety-one percent of undergraduate students. Other applicable results in the USC survey have to do with E-mail. According to the national study, eighty-nine percent of faculty, eighty-eight percent of staff, eighty-six percent of graduate and eighty-five percent of undergraduate students have E-mail capabilities. It also reveals that only forty-two percent of the faculty actually use the E-mail account, compared with thirty-eight percent of staff, thirty-seven percent of graduate students, and twenty-three percent of the undergraduate population.

Methodology

Research Population

The general population for this study was Interlibrary loan users at Ohio State University Prior Health Sciences Library. At Ohio State, not every library user is eligible to use Interlibrary Loan services; the qualifying patron must be associated with Ohio State in some capacity. Also, at most of the libraries in the OSU library system the undergraduate population is not authorized to take advantage of ILL services. This is not the case at the Health Sciences Library, however, where undergraduates are eligible to use ILL and therefore are included in the survey.

A sample was drawn from one year of completed Interlibrary Loan forms (from June 1994 through May 1995) filled out by eligible patrons. A "completed" form not only means that the forms were filled out, but also that the loan transaction

was successful. This constituted 10,223 forms. Every forty-third form was subsequently pulled and copied, resulting in 237; exclusions were made in case of duplication leaving 221. As the mailing process began to yield results, some of the surveys were returned unopened because the patron had moved and left no forwarding address. This happened with both on and off-campus respondents. No attempt was made to locate the new addresses, resulting in a final sample size of 205. In one or two of these cases, the questionnaire was filled out by an office-mate of the intended respondent, for which the investigator was very grateful. It seemed that there was a genuine interest in the study.

Survey Instrument

The survey instrument was created specifically for this study, and is original in its content. The questionnaire is designed to first classify the Interlibrary Loan patron in terms of their position at Ohio State University (e.g., faculty). Then it identified not only ILL use, but also some of the specific hardware/software components of the user's computer (Objective 1). Computer availability, use, and network familiarity of each user was also under investigation (Objective 2). The survey attempted to be clear and succinct so it would be as uncomplicated as possible for the patron to complete.

A pilot study was conducted to determine the validity and clarity of the survey questions. Various librarians at the Prior Health Sciences Library assisted in the endeavor, especially Jonathan Miller, Head of Access Services, and the general semantic changes that their input prompted were greatly appreciated. The Head of

Automation was consulted for computer jargon and system specifics (e.g., Sonngate vs. Sonnet).

Procedure

Ohio State University Health Sciences Library letterhead was employed for the cover letters and the survey instrument itself to avoid any confusion that might occur because of the different university affiliations. Susan Kroll, Director of the Health Sciences Library generously granted permission in this endeavor. Each personalized cover letter explained the purpose and importance of the study, and gave insurance of confidentiality. It also requested that the selected patron respond within two weeks.

OSU campus mail service was used as the medium of transportation for those who had offices on the Ohio State campus, and approximately seventy-five questionnaires had to be mailed using the U.S. Postal Service. Stamped or metered self-addressed envelopes were enclosed for the respondents to facilitate the return of their completed surveys. The first round of mailings was complete on June 16, 1995.

There was a favorable first-response rate, and on July 5, personalized follow-up letters and questionnaires were mailed to the remaining individuals whose completed surveys had not yet been received. The original cover letter, follow-up correspondence, and the survey instrument are included at the end of the paper in Appendix VII.

Data Analysis

Data entry was accomplished using a WordPerfect file saved as ASCII text. The data was then transferred and statistically analyzed using the SAS system. All

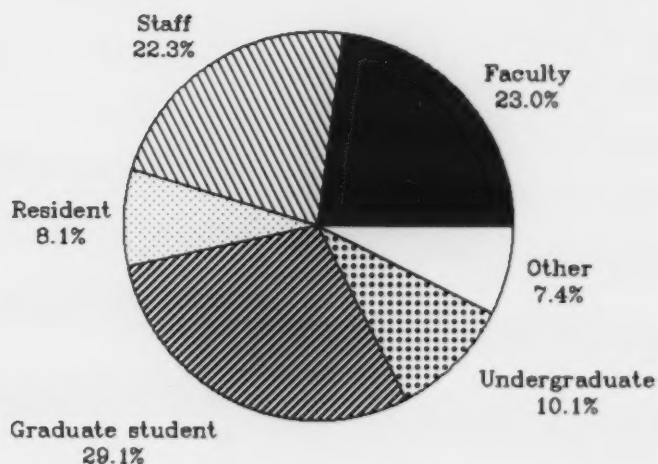
graphs were generated using PFS: First Choice, and tables were generated using WordPerfect 5.2 for Windows.

Results

General Demographics

The final response rate for the survey was 72%, or 148 from a total of 205. The first questions--questions one through four--dealt with general demographics. Question one was designed to find out who the main users of the Interlibrary Loan department are, and questions two, three and four determined the respondents service preferences.

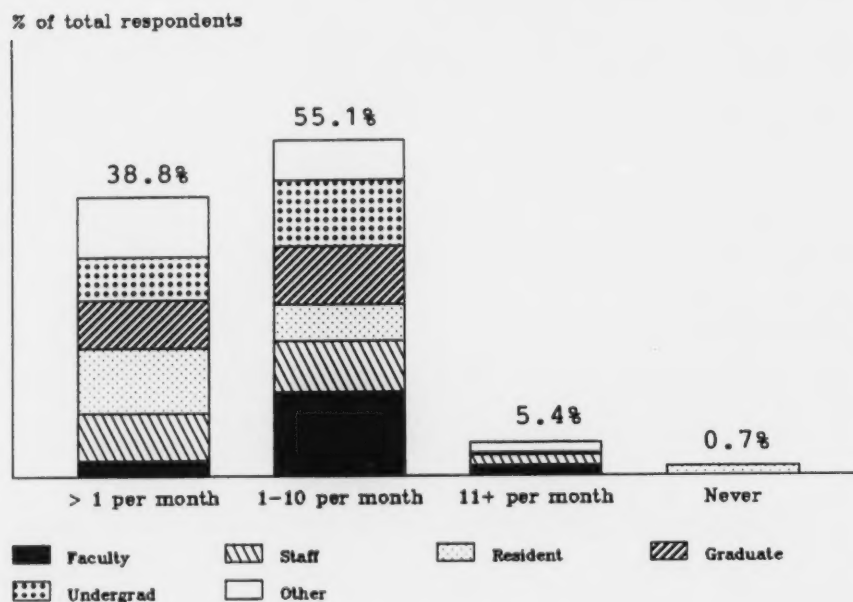
Graph 1



Graph 1 shows that 23% of the respondents were Ohio State University faculty, 22.3% were staff, and 8.1% were residents. The majority of people who answered the survey were graduate students at 29.1%, 10.1% were undergraduates, and 7.4% reported in as "Other." Since no data could be found that showed the percentages by patron type of all Ohio State University library patrons, there can be no statistical comparison of the results. However, it is generally agreed that because of the nature of the academic health sciences library, most of the patrons are graduate students. Appendix I provides a list of respondents who reported in as "Other."

The second question dealt with the frequency with which the patrons used ILL services. Graph 2 illustrates that 38.8% used Interlibrary Loan less than once each month; 55.1% used it 1-10 times a month, 5.4% used the service 11 or more times per month, and .7% (one person) reported never having used the service at all. This last statistic is a bit amusing, especially since respondents were pulled from people who had completed Interlibrary Loan transactions over the past year. Perhaps this respondent did not realize what service they were taking advantage of, or had forgotten that they had used it. The graph also shows percentages by patron type, and Table 1 in Appendix II lists the numerical equivalents for those shown here. Most of the people surveyed reported that they used the Interlibrary Loan service 1-10 times each month, and the majority of the users in this frequency were graduate students.

Graph 2

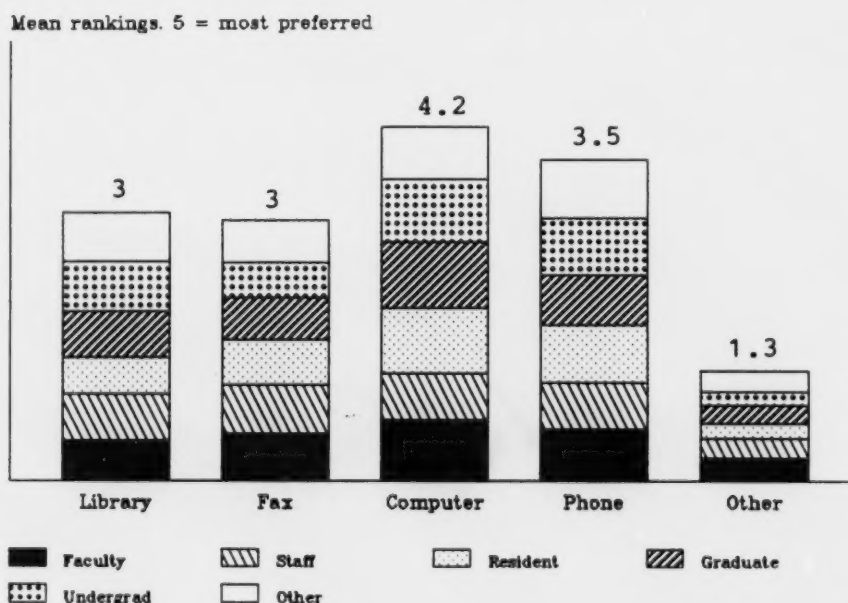


For questions three and four, participants were asked to rank their preferences on a Likert-type scale, one being the highest and five being the lowest choice. During the statistical analysis, the scale was necessarily reversed so the graphs seen in this report illustrate five as the optimum. Mean rankings were used to garner the results and parentheses indicate the mean score for each option.

Question three explored the most preferable way the respondent would like to place an Interlibrary loan request. As represented in Graph 3, the most preferred way to place the request was through the Campus computing network (4.2). This came as a pleasant surprise since the purpose of this project was to determine the best sites for electronic Interlibrary Loan forms. The second most preferable response was to phone in the request (3.5), and tied at third place was to either fax the request (3) or

visit the library and fill out a form (3). Comments listed as "Other" (1.3) were to mail in the completed request form using U.S. mail, send someone else to drop off the form, use the Internet, and use Children's Hospital (part of the Ohio State University network of hospitals) mail system. All these options currently exist, although "use the Internet," was not available during the time of the study. All of the patron types listed chose sending the request through the university computing network as their first choice except for respondents characterized as "Other." The majority in this group reported that they would rather phone in the request. For the statistical breakdown of preferences by patron type, please see Appendix II.

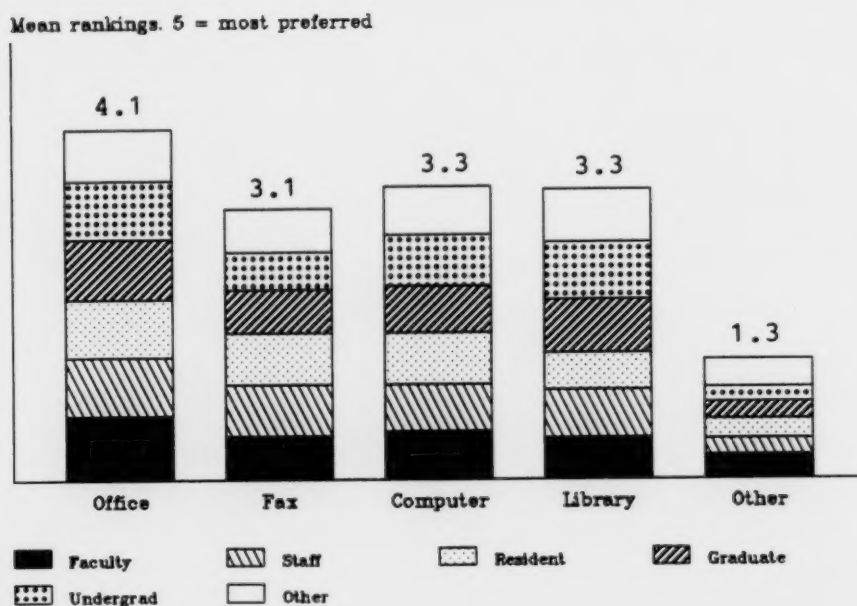
Graph 3



Question four concerned the most preferred way to receive the completed Interlibrary Loan transaction material. The most selected method was to use the

campus mail service for delivery to the patrons office or department (4.1), followed by obtaining the material via desktop (3.3), picking up at the Health Sciences Library (3.3), and receiving the filled request through the fax machine (3.1). "Other" responses (1.3) included using U.S. mail, UPS, special delivery at Children's hospital, and having someone other than the requester pick up the materials. The option to have another person pick up the material is already available in a limited fashion through possession of a faculty authorization card. As with question three, the overall favorite response--to have the materials mailed to their office/department--was also the favorite of all of the different patron types except patrons categorized as "Other." This group indicated that they would most like to pick up the materials at the library. Graph 4 represents these results, and the numerical breakdown by patron type is given in Appendix II.

Graph 4

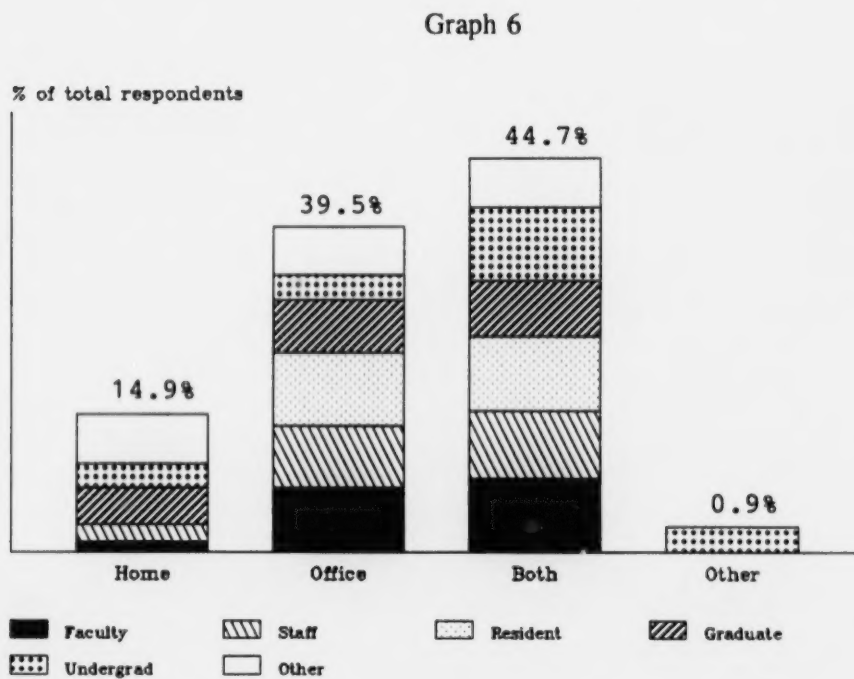
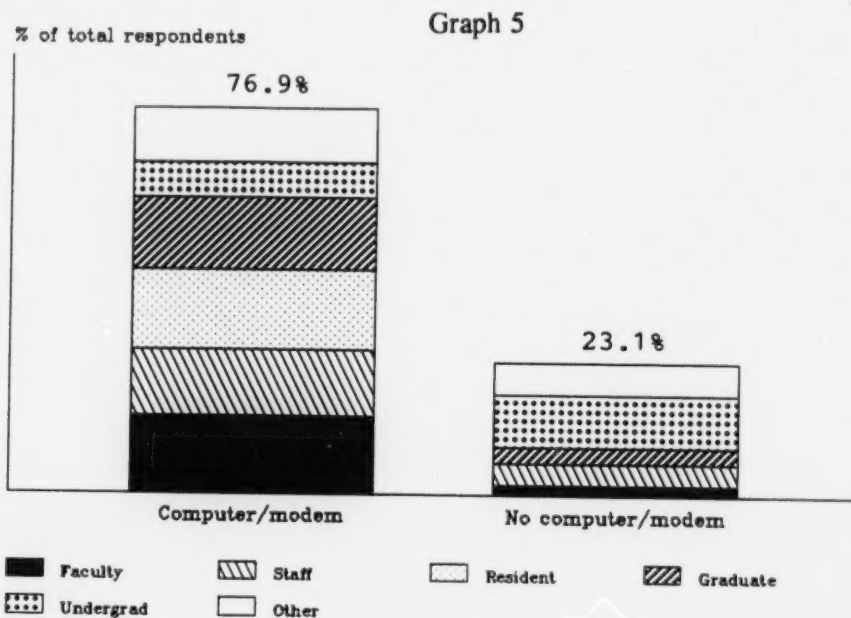


Objective 1

The next four questions in the survey dealt with Objective 1, which was to identify some of the hardware/software tools available to Ohio State University Interlibrary Loan patrons in their offices, homes, or campus computer laboratories. Question five asked whether the library user had access to a computer with a modem or Sonnet connection. To this question, 76.9% responded yes and 23.1% answered no. The overwhelming majority in each category responded that they did have the use of a computer with a modem or Sonnet connection except for the Undergraduates. Results show that a distressing sixty percent of these students report not having access to this type of computer, when in fact there are numerous computer labs scattered throughout campus for the Undergraduate students' use. Perhaps there are unseen circumstances that prevent these respondents from taking advantage of these computer facilities. Graph 5, which appears on the following page, illustrates the percentages broken down by different patron types. The numerical representation of the breakdown by patron types is available in Appendix III.

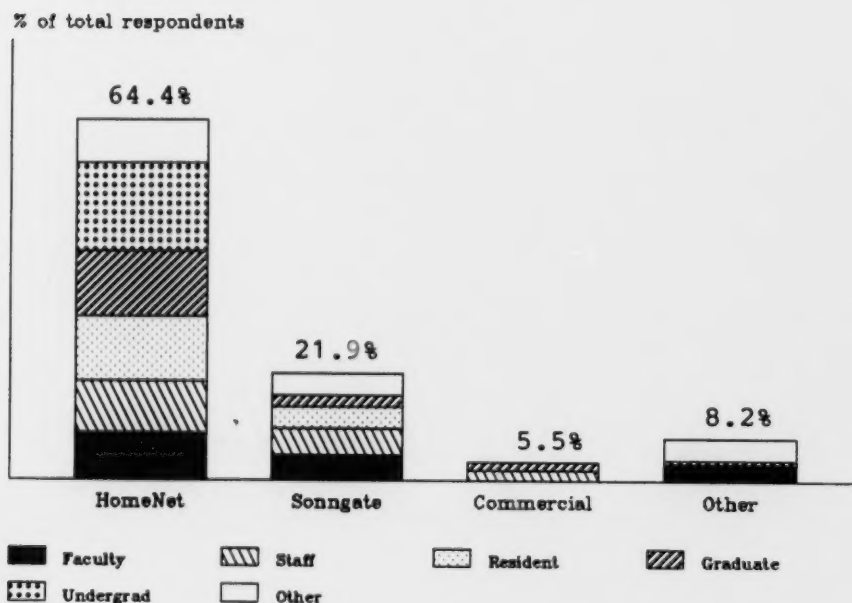
If the respondents answered yes to question five, they were then asked if they used this computer at home, office or computer lab, or both. Graph 6 shows that 14.9% had access to a computer with a modem at home, 39.5% at the office or university computing site, 44.7% had both home and office/lab availability. Response by .9% was "Other." This corresponded to one patron who indicated that the computer they used was "my office PC at Children's Hospital." For purposes of this

study, that qualifies as an office or university computing site, although the category of the response was not changed.



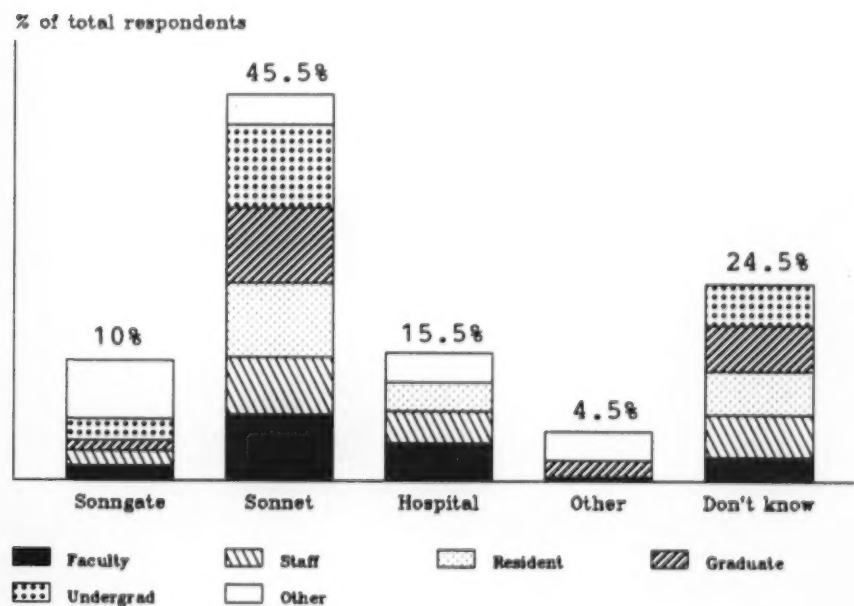
Question six instructed the patron to go on to question seven if they answered that they have access to a computer with a modem at their home. In question seven, the respondent is asked how they access the Ohio State computing system. HomeNet was the most popular tool at 64.4%, Sonngate via modem was next at 21.9% followed by "Other" at 8.2% and commercial providers were last at 5.5%. Graph 7 illustrates these responses, and Appendix III lists not only the numerical statistics for the different patron types, but also the commercial providers and entries for "Other." There were only four respondents--two of whom were staff and the other two were graduate students--who reported using commercial providers, and only one divulged the name of that provider.

Graph 7



Graph 8 details the hardware/software used by people that access a computer from their office or campus computing site. As is evident, a Sonnet connection is by far the most popular at 45%. This came as no surprise since most of the offices at Ohio State University that have computers are connected in this manner. In other responses, 24.5% report not knowing how their computer is outfitted, 15.5% use the hospital Gate, and 10% use Sonngate via modem. Response rate for "Other" was 4.5%, and included comments such as HomeNet, OhioLink, "telnet to various sites," "go to the library," Orion, and Magnus. By these comments, it seems that either the question was not clear as worded or the respondent was not sure of the setup of the computer. Many of the terms mentioned are networked sites as opposed to computer hardware/software. Again, Appendix III provides a breakdown of question eight by the patron types listed in question one.

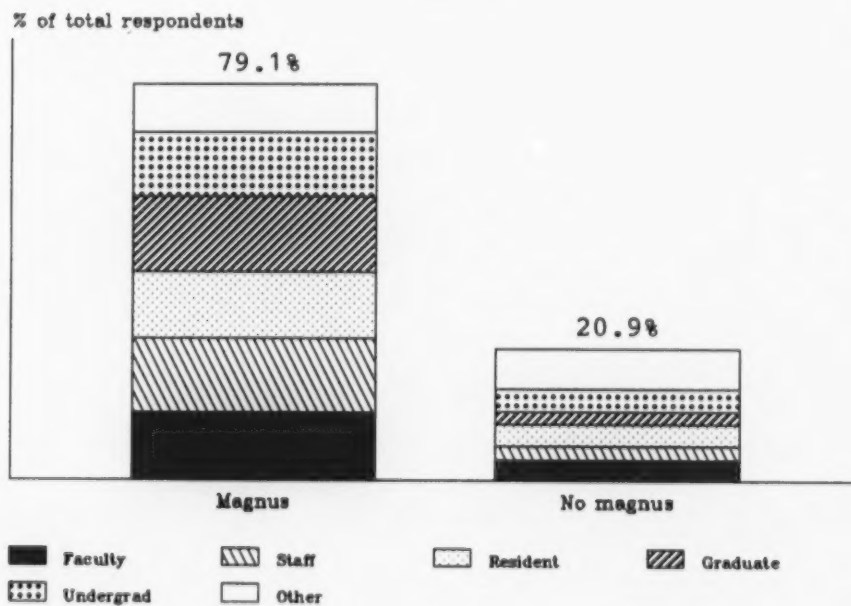
Graph 8



Objective 2

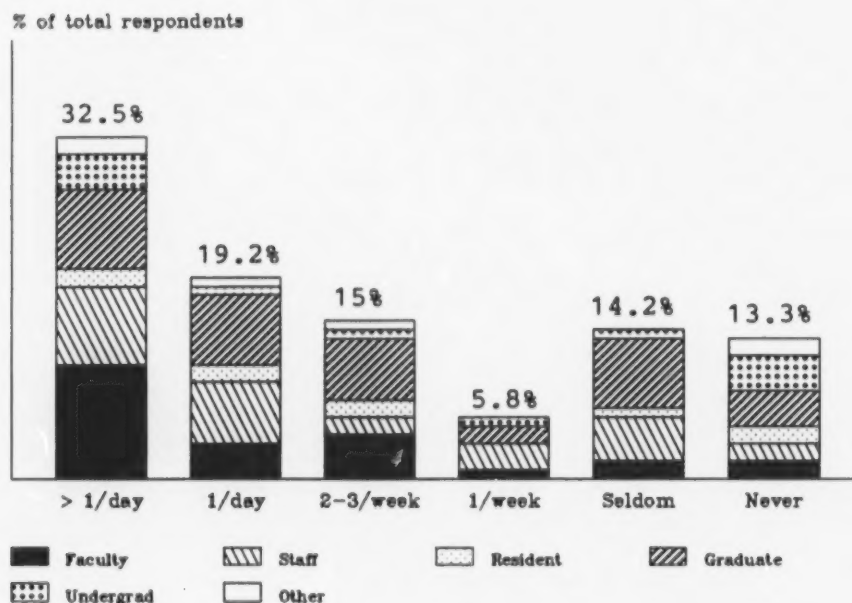
The final group of questions, questions nine through twelve, addressed Objective 2. This objective was to discover which campus resources were used and how frequently. Respondents related that 79% have a Magnus account and 21% do not. Graph 9 shows a break down of account ownership by patron type, and the actual percentages are detailed in Appendix IV. The only respondent group that did not show an overwhelming difference between the affirmative and the negative answer was the "Other" category." In this group, 55% said that they had Magnus as opposed to 45% who did not. The surprise here is that so many people who are not directly affiliated with the university are authorized to have this type of access to the university's computing facilities. For a detailed list of patrons categorized as "Other," please refer again to Appendix I.

Graph 9



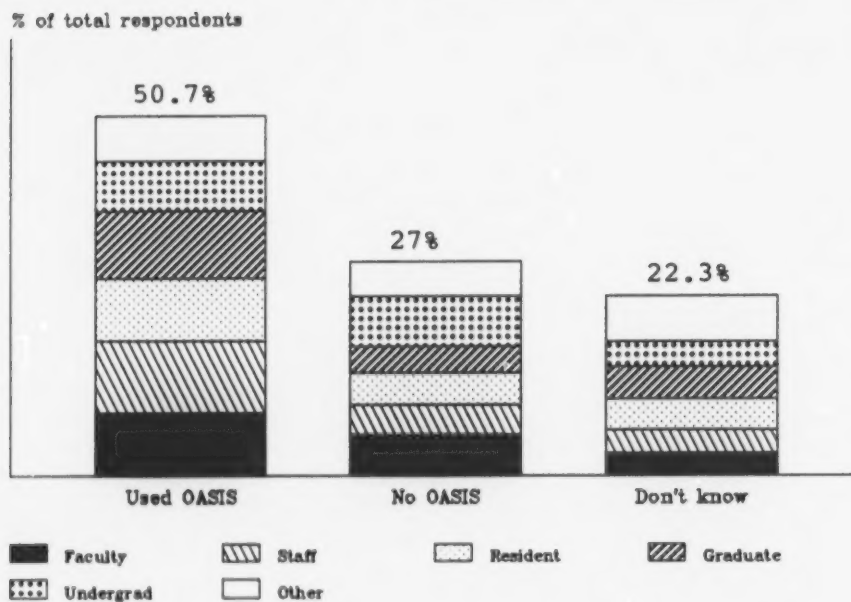
The intent of question ten was to reveal how often the patron with a Magnus account actually uses the account. As shown in Graph 10, 32.5% use the account more than once each day, 19.2% once each day, 15% checks their account two or three times each week, 5.8% once each week, 14.2% relate that they seldom use their Magnus account, and 13.3% say they have never used it at all. The numerical breakdown for the different patron types are available in Appendix IV.

Graph 10



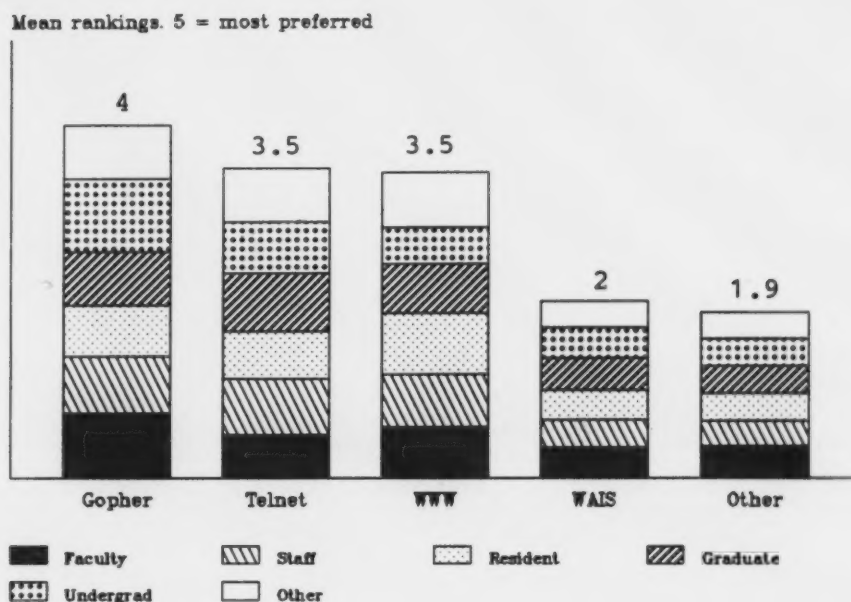
Graph 11 shows whether the respondent has used OASIS, the Ohio State University computer information network. Slightly more than half, 50.7% report using the network, while 27% say they have not and 22.3% do not know what OASIS is. Not knowing what it is, of course, does not mean that the patron has not used it.

Graph 11



The final question of interest in the survey was designed to find out what the most preferred method of Internet access was. Again, the mean was used to determine the frequency, and the averages are shown in parentheses. Graph 12 shows that Gopher (4) is still the most popular, followed by telnet (3.5) and the World Wide Web (3.5) at a tie for the second most preferred manner of Internet access. WAIS (2) and "Other," (2) tied for least preferable. "Other" included comments such as "hospital Gate" and "DOS has Internet, but I don't believe I have access to it." It is interesting to note--and is especially evident by looking at the numerical statistics detailed in Appendix IV--that the clear favorite of the faculty is Gopher (4.4 on a scale with 5 as best), residents prefer the World Wide Web (4.2) and undergraduates also overwhelmingly chose Gopher (5).

Graph 12



The closing question in the survey was included to determine if the respondent would be willing to give their reactions about the placement and physical layout of the new electronic forms in a personal interview. That, however, is the subject of another study at a later date.

Conclusion

This project was designed with one goal in mind: to determine the best place/access points to put two newly developed electronic Interlibrary Loan forms. It was accomplished by investigating general demographics, and eliciting responses from questions organized under two objectives. The first objective was to determine the

hardware/software capabilities available to the Interlibrary Loan patron at their office, home, university computing site, or a combination of the above. The second objective was to identify various computing resources or tools that the patron was familiar with and took advantage of.

The demographic questions at the beginning of the survey revealed that most respondents would prefer to place their Interlibrary Loan request through the campus computing network. On the flip side, most of them would prefer to have the received ILL materials delivered to their campus address, but the second most popular choice was to have them sent back through the computer. This would result in an entirely automated loan process. Of course, even with these results, Interlibrary Loan should continue to offer library pick-up or other alternatives for its non-networked patrons.

Results from the first objective showed that Interlibrary Loan patrons at the Prior Health Sciences Library are familiar with computers. The clear majority of patrons in all category types except the undergraduate population have convenient electronic access, most from both their homes and offices. As mentioned earlier in this paper, the undergraduates have electronic access as well, though they may be unaware of it. Perhaps more patron education is warranted.

Since most office computers at Ohio State University are supplied with Sonnet connections, access to the World Wide Web access is fast and convenient. HomeNet was shown to be the most popular method of home network connections, and one of the benefits of HomeNet is that it provides a SLIP connection. This type of connection uses regular telephone lines to imitate a Sonnet connection, albeit at a

slower speed. Greater gopher capabilities as well as Web connectivity are also delivered through HomeNet.

The second objective showed that almost eighty percent of respondents had a Magnus account, which offer E-mail and gopher access, among other things. Most of the patrons report being very active in these accounts, and a clear majority is familiar with the campus gopher, OASIS. Compared to the USC survey described previously, Ohio State University ranked favorably. Compared to the ninety-nine percent of faculty, ninety-seven percent of staff, ninety-seven percent of graduate students, and ninety-one percent of undergraduate students, one-hundred percent of all patron types have Internet access at Ohio State University through the University's computing network and OhioLink. The user need only visit any of the campus library locations. Although not strictly synonymous, Magnus account use reported in this survey will be compared to E-mail account use in the USC survey since E-mail is by far the most used function of the account. As reported in the USC survey, forty-two percent of faculty actually used their E-mail account, compared to a ninety-three percent use by OSU faculty. Other relationships are thirty-eight percent of the USC staff respondents to ninety-three percent OSU staff respondents, thirty-seven percent USC to eighty-nine percent OSU graduate student respondents, and twenty-three percent USC to sixty-seven percent OSU undergraduate student respondents. These results must be taken with the understanding that the USC survey was conducted in 1993 and this study was sent out in 1995. Heavy use of Gopher, telnet, and World Wide Web is also evident by reviewing this survey's results, indicating that the Interlibrary Loan users at the

Prior Health Sciences Library, which could be expanded to mean OSU library patrons in general, are for the most part computer literate.

In conclusion, the obvious choices for placement of the new electronic Interlibrary Loan form are on OASIS, the Ohio State gopher, and through the World Wide Web. Since over half of the respondents reported having used OASIS, and another quarter said that they weren't quite sure if they had or not, it seems appropriate. Gopher was also reported to be the overall favorite mode of Internet access. The World Wide Web seems the second most logical choice because it is generally agreed that the Web and the interactive benefits that it brings are the way the future is headed. It was also shown to be the favorite type of computer medium of the graduate students polled.

The WWW version of the new electronic Interlibrary Loan form is shown in Appendix V, and is currently available for Ohio State University patron use. The OASIS version shown in Appendix VI is not yet available to the public. Since the form will be on the campus gopher and must deal with the inevitable bureaucracy that goes with it, it is not as easy to implement.

The results of this lead to some interesting areas for future research. One would be to repeat the survey in a couple of years. The changes in technology already underway at Ohio State would necessitate some terminology changes (e.g. Magnus to HomeNet or OfficeNet), but that is easily accomplished. Tracking the trends in computer knowledge and use would not only be interesting, but also would be useful in the development of new services. Ideally speaking, computer access, use

and knowledge of electronic information resources (e.g. World Wide Web) would all be significantly higher.

Another area for continuing research would be to investigate the frequency of use between the OASIS and World Wide Web forms. The results of this survey showed that Gopher was still the favorite (for most patron types) electronic medium for information gathering, however most research in the field points to the World Wide Web as the medium of the future. Of course, this study would have to wait until the two forms have been in place for a while and are familiar to the library patron.

All in all, it seems that Ohio State University is fairly well on the road to computer literacy and use. Electronically transmitted Interlibrary Loan forms are just the first step in expansion of services made possible by adequately equipped computers and appropriately informed library patrons.

Reference List

- Bellamy, Lois M., John T. Silver, and Mary King Givens. 1991. Remote access to electronic library services through a campus network. Bulletin of the Medical Library Association 79 (January):53-62.
- Corrall, Sheila. 1993. ADONIS at Aston: introducing electronic document delivery in the networked library. (February): 173-177.
- Green, Kenneth C., and Skip Givens. 1994. Campus Computing 1993. The USC National Survey of Desktop Computing in Higher Education. University of Southern California, Los Angeles. Technology, Teaching, and Scholarship Project. ED 370 516.
- Ives, B., and M.H. Olson. User Involvement and MIS Success: A Review of Research. Management Science 30 (May): 586.
- Keil, Mark, and Erran Carmel. 1995. Customer-Developer Links in Software Development. Communications of the ACM 38 (May): 33-44.
- Newman, D. 1986. Dialog on Dialog: Interview with Roger Summit. Wilson Library Bulletin 60 (January): 24.
- OASIS. 1995. [online information source] Who can access SONNET. Available through Ohio State University at gopher.acs.ohio-state.edu:70/00.

Appendix I

Detail of "Other" patron types

Alumni

Professional student - Optometry

Medical student

Post Doctoral Fellow - Pharmacy Administration

Recent graduate in Nursing

Professional student - recent graduate

Recent medical school graduate

Graduated June 95, Department of Allied Medicine, Occupational Therapy

Graduate (M.S.)

Graduate student - Wright State University

Staff, Children's Hospital

Alumni

Former undergraduate student in Nursing

Appendix II

Table 1 - Corresponds to Graph 2

Detail of patron type and frequency of Interlibrary Loan forms placed each month

Patron Type	Less than one per month	1-10 per month	11+ per month	Never
Faculty	14.7%	76.5%	8.8%	0%
Staff	43.8%	46.9%	9.4%	0%
Resident	58.3%	33.3%	0%	8.3%
Graduate	44.1%	53.5%	2.3%	0%
Undergrad.	40%	60%	0%	0%
Other	54.5%	36.4%	9.1%	0%

Table 2 - Corresponds to Graph 3

Detail of patron type and Interlibrary Loan placement method preferences using mean variance. 5=most preferred

Patron Type	Visiting library	Faxing request	Send by computer	Telephone request	Other
Faculty	2.7	3.1	4.1	3.5	1.5
Staff	3.2	3.3	3.9	3.2	1.4
Resident	2.5	3.1	4.5	3.9	1
Graduate	3.1	2.9	4.5	3.4	1.2
Undergrad.	3.5	2.4	4.3	3.9	1
Other	3.3	2.9	3.6	3.9	1.4

Table 3 - Corresponds to Graph 4

Detail of patron type and Interlibrary Loan material receival preferences using mean variance. 5=most preferred

Patron Type	Campus mail	Fax machine	Computer	Library pick-up	Other
Faculty	4.4	3	3.3	2.8	1.6
Staff	3.9	3.5	3.2	3.3	1.1
Resident	4	3.5	3.5	2.5	1.4
Graduate	4.1	2.9	3.2	3.7	1.2
Undergrad.	4	2.6	3.5	3.9	1
Other	3.5	2.9	3.3	3.7	1.9

Appendix III

Table 4 - Corresponds to Graph 5

Detail of patron type and access to a computer with a modem

Patron Type	Access	No Access
Faculty	88.2%	11.8%
Staff	75.8%	24.2%
Resident	90.9%	9.1%
Graduate	81.4%	18.6%
Undergrad	40%	60%
Other	63.6%	36.4%

Table 5 - Corresponds to Graph 6

Detail of patron type and location of computer with modem access

Patron Type	Home	Office	Both	Other
Faculty	6.8%	43.3%	50%	0%
Staff	11.5%	42.3%	46.1%	0%
Resident	0%	50%	50%	0%
Graduate	25%	36.1%	38.9%	0%
U-graduate	16.8%	16.8%	50%	16.8%
Other	33.3%	33.3%	33.3%	0%

Table 6 - Corresponds to Graph 7

Detail of patron type and access to the Ohio State computer network from home

Patron Type	HomeNet	Sonngate	Commercial	Other
Faculty	52.4%	28.6%	0%	19%
Staff	58.8%	29.4%	11.8%	0%
Resident	75%	25%	0%	0%
Graduate	73.9%	13%	8.7%	4.4%
U-graduate	100%	0%	0%	0%
Other	50%	25%	0%	0%

One commercial provider named was "PC Anywhere connection to office," other respondents did not give the name, although they were asked to do so.

Comments under "Other" were Procomm, Chilan, "call PC at Children's Hospital then use the Hospital Gate," and 5 people responded that they did not access the Ohio State network at all.

Table 7 - Corresponds to Graph 8

Detail of patron type and access to the Ohio State network from the office

Patron Type	Sonngate	Sonnet	Hospital Gate	Other	Don't know
Faculty	9.7%	45.2%	25.8%	3.2%	16.1%
Staff	10.7%	39.3%	21.4%	0%	28.6%
Resident	0%	50%	20%	0%	30%
Graduate	7%	51.7%	0%	10.3%	31%
U-graduate	14.3%	57.1%	0%	0%	28.6%
Other	40%	20%	20%	20%	0%

Appendix IV

Table 8 - Corresponds to Graph 9

Detail of Magnus account ownership by patron type

Patron Type	Magnus account	No Magnus
Faculty	76.5 %	23.5 %
Staff	84.9 %	15.1 %
Resident	75 %	25 %
Graduate	86.1 %	13.9 %
Undergrad	73.3 %	26.7 %
Other	54.6 %	45.4 %

Table 9 - Corresponds to Graph 10

Detail of the frequency of Magnus account use by patron type

Patron type	> once each day	Once each day	2-3 times each week	Once each week	Seldom	Never
Faculty	48.2 %	14.8 %	18.5 %	3.7 %	7.4 %	7.4 %
Staff	32.1 %	25 %	7.1 %	10.7 %	17.9 %	7.1 %
Resident	22.2 %	22.2 %	22.2 %	0 %	11.1 %	22.2 %
Graduate	23.7 %	21.1 %	18.4 %	5.3 %	21.1 %	10.5 %
U-grad	33.3 %	8.3 %	8.3 %	8.3 %	8.3 %	33.3 %
Other	33.3 %	16.7 %	16.7 %	0 %	0 %	33.3 %

Table 10 - Corresponds to Graph 11

Detail of OASIS use by patron type

Patron Type	OASIS use	No OASIS use	Don't know
Faculty	50%	32.6%	17.6%
Staff	57.6%	24.2%	18.2%
Resident	50%	25%	25%
Graduate	53.5%	20.9%	25.6%
Undergrad	40%	40%	20%
Other	36.4%	27.3%	36.3%

Table 11 - Corresponds to Graph 12

Detail of Internet access preferences by patron type using the mean variance
5=most preferred

Patron type	Gopher	Telnet	WWW	WAIS	Other
Faculty	4.4	2.9	3.5	2.1	2.2
Staff	3.9	3.8	3.6	1.9	1.7
Resident	3.5	3.3	4.2	2.1	1.9
Graduate	3.7	4	3.4	2.1	1.9
Undergrad	5	3.5	2.5	2.2	1.8
Other	4	3.7	3.7	1.8	1.8

Prior Library Document Delivery Service

Read the following Copyright Statement then make your request selection at the bottom of the page.

Copyright Notice

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material.

Under certain conditions specifies in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for purposes other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes other than "fair use," that user may be liable for copyright infringement.

This institution reserves the right to refuse to accept a copying order if, in its judgement, fulfillment of the order would involve violation of copyright law.

Journal Article Request

Book Request

NOTE: Use the Book Request Form for AudioVisual materials and Dissertations.

Prior Reference Desk | Prior Health Sciences Library

Prior Library Document Delivery Service

Journal Article Request

Title of Journal:
Volume :
Issue :
Year :
Pages :
Author of Article:
Title of Article:
Source of Reference:
Medline Unique ID (if available):

Requestor Information

Your Name:
Address:
(for OSU, supply Building and Room #)
Department:
Phone:
E-Mail Address:
Social Security #:

How would you like your request delivered?

1. Campus Mail.
2. I will Pick it Up. *(Note: Original Materials Must be picked Up)*

If this item is available at OSU, would you pay to have your request copied and delivered?

1. No
2. Yes, I will pay

If Yes, Are You:

1. Affiliated with OSU (\$5 per item)
2. Not Affiliated with OSU (\$15 per item)

To submit your Interlibrary Loan request, press this button: .

Prior Library Document Delivery Service

Book Request

Author:
Title of Book:
Publisher :
Place :
Date :
Chapter Author:
Chapter Title:
Title of Article:
Source of Reference:

Requestor Information

Your Name:
Address:
(for OSU, supply Building and Room #)
Department:
Phone:
E-Mail Address:
Social Security #:

To submit your Interlibrary Loan request,
press this button:

Appendix VI

Please note that there are inevitable inconsistencies due to the fact that the forms are still under construction.

INTERLIBRARY LOAN SERIAL REQUEST The Ohio State University Libraries

Document Delivery Office
The Health Sciences Library
175 W. 11th Avenue
292-4894
heall@magnus

NOTICE--WARNING CONCERNING COPYRIGHT RESTRICTIONS

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

This institution reserves the right to refuse to accept a copying order if, in its judgment, fulfillment of the order would involve violation of copyright law.

MOVE FROM FIELD TO FIELD BY USING THE TAB KEY.
DO NOT TAP ENTER/RETURN UNTIL YOU HAVE COMPLETED ALL INFORMATION.

1. Name
2. Social Security Number:
3. E-mail Address:
5. Department:
6. Campus Mail Address
Building and Room:
Street:
7. Home Address (if no campus address)
Street:
City, State, Zip Code:

PLEASE SUPPLY FULL INFORMATION; DO NOT ABBREVIATE

9. Title of Journal:
10. Volume:

11. Issue:
12. Date:
13. Pages:
14. Author(s) of Article
15. Title of Article

17. MEDLINE UI,
or other source of the reference:

19. If this article is available at OSU, would you like to have a
copy delivered to you for a fee?
20. If yes, are you affiliated with OSU?
21. \$5.00 per item for affiliated patrons. \$15.00 per item for
non-affiliated patrons.

INTERLIBRARY LOAN BOOK REQUEST

Document Delivery Office
The Health Sciences Library
175 W. 11th Avenue
292-4894
heaille@magnus

YOU CAN QUICKLY REQUEST MANY BOOKS THROUGH OSCAR AND OHIO LINK.
MOVE FROM FIELD TO FIELD BY USING THE TAB KEY. DO NOT TAP
ENTER/RETURN UNTIL YOU HAVE COMPLETED ALL THE INFORMATION
REQUESTED.

1. Name
2. Social Security Number
3. E-mail Address
5. Department
6. Campus Mail Address
Building and Room
Street
7. Home Address
(if no campus address)
Street
City, State, Zip Code

PLEASE SUPPLY FULL INFORMATION: DO NOT ABBREVIATE

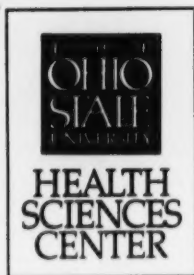
8. Book, Thesis, Dissertation, or A/V materials
9. Author(s)
10. Title of Book
11. Publisher
12. Place of Publication
13. Date of Publication
17. OCLC Accession Number, ISBN,
or other source of reference

IF REQUESTING A PHOTOCOPY OF A BOOK CHAPTER OR SECTION ONLY

18. Chapter/Section Author(s)
19. Chapter/Section Title
20. Page Numbers

DELIVERY INFORMATION

Originals must be picked up at the Circulation Desk of the Health Sciences Library. If you are requesting a photocopy, would you like this material mailed to your campus address?



John A Prior Health Sciences Library

175 West 11th Avenue
Columbus, OH 43210-2015

Phone: (614) 292-9810

Telefax: (614) 292-5717

Re: Electronic Interlibrary Loan transmittal

June 16, 1995

Dear firstname ~ ,

I am a graduate student in the School of Library and Information Science at Kent State University Columbus Program and an employee of the Prior Health Sciences Library at Ohio State University. As part of the requirements for my master's degree - and in conjunction with the Prior Health Sciences Library - I am conducting research in electronic transmission of Interlibrary Loan requests. The results of the survey will help to determine the placement of two new electronic Interlibrary Loan request forms. Of special concern is the accessibility and capabilities of computers that are used by the faculty, staff, and students that the Library supports. Every information seeker at Ohio State will benefit from the results of the study, and you will have the satisfaction of knowing that you have helped to create a valuable and timely new electronic resource.

This questionnaire should not take more than 10 minutes to fill out. Please return the enclosed survey in the self-addressed stamped envelope to me by June 30. If you have further questions about the survey, feel free to contact me at 614-523-3453. The results will be of value not only to you, but to all researchers at Ohio State University.

Sincerely,

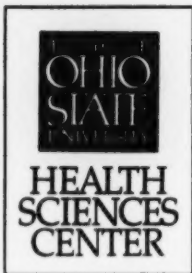
Holly Lopeman, Principal Investigator
Circulation Department
Prior Health Sciences Library
376 W. 10th Ave.

Please read the reverse side of this paper for additional details about the survey.

Additional details about the survey:

- 1. Anonymity and confidentiality are guaranteed. Only the Principle Investigator and select faculty at the OSU Health Sciences Library have access to the survey data.**
- 2. The survey is completely voluntary; there is no penalty if you choose not to participate.**
- 3. A copy of the survey results are available upon request.**
- 4. For any questions about this research, you may also contact Professor Mary Machin, my research paper advisor, at 292-7746.**
- 5. For more information about research at Kent State University, please contact Dr. Eugene Wenninger, Office of Research and Sponsored Programs, at 216-572-2070.**

Your participation in this survey is greatly appreciated.



John A Prior Health Sciences Library

175 West 11th Avenue
Columbus, OH 43210-2015

Phone: (614) 292-9810
Telefax: (614) 292-5717

Survey regarding electronic access to Interlibrary Loan Services

Dear fname ~ ,

We are concluding the data collection phase of our study about Interlibrary Loan users computer accessibility, and noticed that your questionnaire has not been received. Your response is very important to us, and the questions have been kept to an absolute minimum so that it should take no longer than 10 minutes to complete.

Every information seeker at Ohio State University will benefit from the results of the study, and you will have the satisfaction of knowing that you have helped to create a valuable and timely new electronic resource. There is enclosed for you convenience a new survey form, and your response by July 20 would be greatly appreciated. All responses are kept strictly confidential.

Yours very sincerely,

Holly Lopeman
Principal Investigator



Survey regarding electronic access to Interlibrary Loan Services

1. I am an OSU:

- ☐ Faculty, Department of _____
- ☐ Staff, Department of _____
- ☐ Resident, Department of _____
- ☐ Graduate student, Department of _____
- ☐ Undergraduate student, Department of _____
- ☐ Other (please state) _____

2. I place an Interlibrary Loan request:

- ☐ Less than once a month
- ☐ 1-10 times a month
- ☐ 11 + times a month
- ☐ I have never placed an Interlibrary loan request.

3. I would prefer to place an Interlibrary loan request by (please rank the preference, 1 being most to 4 being the least preferable - "other" is optional):

- ☐ Visiting the library and filling out a form
- ☐ Faxing the request
- ☐ Placing the request through the University's computer network
- ☐ Phoning in the request
- ☐ Other, please state _____

4. I would prefer to receive the requested material by (please rank the preference, 1 being the most to 4 being the least preferable - "other" is optional):

- ☐ OSU office/department delivery (campus mail)
- ☐ Fax
- ☐ Desktop (via modem or SONNET)
- ☐ Pick up at the Health Sciences Library
- ☐ Other, please state _____

5. Do you have access to a computer with a modem or SONNET connection?

- ☐ Yes
- ☐ No

6. If yes, do you use this computer at:

- ☐ Home (go to question 7)
- ☐ Office or University computing site (go to question 8)
- ☐ Both (answer both 7 and 8)
- ☐ Other (please state) _____ (go to question 8)

7. If you have a home computer, how do you access the Ohio State system?

- ☐ HomeNet
- ☐ Sonngate via modem
- ☐ Commercial provider (ex. America Online, CompuServe)
- ☐ Which one? _____
- ☐ Other (please state) _____

8. If you use an office/department or University computing site, how do you access the Ohio State system?

- ☐ Sonngate via modem
- ☐ Direct SONNET connection
- ☐ Hospital backbone (Gate)
- ☐ Other (please state) _____
- ☐ I do not know.

9. Do you have a Magnus and/or an E-mail account?

- ☐ Yes ☐ No

10. How often do you use your Magnus/E-mail account?

- ☐ More than once each day
- ☐ Once each day
- ☐ Two or three times each week
- ☐ Once each week
- ☐ I seldom use my Magnus/E-mail account.
- ☐ I have never used my Magnus/E-mail account.

11. Have you ever used OASIS?

- ☐ Yes ☐ No
- ☐ I don't know what that is.

12. Which methods of Internet access do you prefer? Please put in rank order (1 being the best) all that apply. If you do not know the application, please leave it blank.

- ☐ Gopher (OASIS)
- ☐ Telnet
- ☐ World Wide Web
- ☐ WAIS
- ☐ Other (please state) _____

13. Would you be interested in helping to test the new electronic interlibrary loan form (about 15 minutes, at either your office or the library)?

- ☐ Yes ☐ No

Thank you very much for taking the time to respond to this survey.

Sincerely,

Holly Lopeman, Principal Investigator